

# Product data sheet

Specifications



## plug in relay, Harmony Electromechanical Relays, 15A, 3CO, lockable test button, 12V DC

RPM31JD

⚠ Discontinued on: Jan 23, 2021

⚠ Discontinued

**Product availability: Non-Stock - Not normally stocked in distribution facility**

### Main

Range of Product	Harmony Electromechanical Relays
Series name	Power
Product or Component Type	Plug-in relay
Device short name	RPM
Contacts type and composition	3 C/O
Status LED	Without
Minimum switching capacity	170 mW 10 mA, 17 V
Release time	20 ms at nominal voltage
Ambient air temperature for operation	-40...131 °F (-40...55 °C)
[Ithe] conventional enclosed thermal current	15 A -40...131 °F (-40...55 °C)

### Complementary

[Uc] control circuit voltage	12 V DC
Control Type	Lockable test button
[Ie] rated operational current	15 A 277 V AC) UL 15 A 28 V DC) UL 15 A 250 V AC) NO IEC 15 A 28 V DC) NO IEC 7.5 A 250 V AC) NC IEC 7.5 A 28 V DC) NC IEC
Degree of protection (Housing only)	IP40 conforming to EN/IEC 60529
Rated operational voltage limits	9.6...13.2 V DC
[Ui] rated insulation voltage	250 V IEC 300 V CSA 300 V UL
Maximum switching voltage	250 V IEC
Drop-out voltage threshold	$\geq 0.1 U_c$ DC
Average coil consumption	1.5 W
Average resistance	80 Ohm at 68 °F (20 °C) +/- 10 %
Maximum switching capacity	3750 VA 420 W
Load current	15 A 250 V AC 15 A 28 V DC
Operating time	20 ms at nominal voltage

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Mechanical durability</b>	1000000 cycles
<b>Electrical durability</b>	100000 cycles resistive
<b>Safety reliability data</b>	B10d = 100000
<b>Operating rate</b>	<= 1200 cycles/hour under load <= 18000 cycles/hour no-load
<b>Utilisation coefficient</b>	20 %
<b>Dielectric strength</b>	1500 V AC between contacts with micro disconnection 2000 V AC between coil and contact with reinforced 2000 V AC between poles with basic
<b>[Uimp] rated impulse withstand voltage</b>	4 kV 1.2/50 µs
<b>Protection category</b>	RT I
<b>Operating position</b>	Any position
<b>Test levels</b>	Level A group mounting
<b>Device presentation</b>	Complete product
<b>Contacts material</b>	AgNi
<b>Shape of pin</b>	Flat
<b>Product Weight</b>	0.119 lb(US) (0.054 kg)

## Environment

<b>Pollution degree</b>	3
<b>Standards</b>	EN/IEC 61810-1 UL 508 CSA C22.2 No 14
<b>Product Certifications</b>	EAC CSA UL
<b>Ambient Air Temperature for Storage</b>	-40...185 °F (-40...85 °C)
<b>Vibration resistance</b>	3 gn +/- 1 mm 10...150 Hz)5 cycles in operation 5 gn +/- 1 mm 10...150 Hz)5 cycles not operating
<b>Shock resistance</b>	15 gnin operation 30 gnot operating

## Ordering and shipping details

<b>Category</b>	US10CP221127
<b>Discount Schedule</b>	0CP2
<b>GTIN</b>	3389119402026
<b>Returnability</b>	No

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	1.9 in (4.7 cm)
<b>Package 1 Width</b>	1.0 in (2.5 cm)
<b>Package 1 Length</b>	1.1 in (2.8 cm)
<b>Package weight(Lbs)</b>	2.01 oz (57 g)
<b>Unit Type of Package 2</b>	BB1

<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	1.2 in (3.1 cm)
<b>Package 2 Width</b>	4.1 in (10.5 cm)
<b>Package 2 Length</b>	6.9 in (17.5 cm)
<b>Package 2 Weight</b>	20.2 oz (573 g)
<b>Unit Type of Package 3</b>	S01
<b>Number of Units in Package 3</b>	80
<b>Package 3 Height</b>	5.9 in (15 cm)
<b>Package 3 Width</b>	5.9 in (15 cm)
<b>Package 3 Length</b>	15.7 in (40 cm)
<b>Package 3 Weight</b>	11.11 lb(US) (5.04 kg)

## Contractual warranty

<b>Warranty (in months)</b>	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Better

#### Materials and Substances

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **Yes**

EU RoHS Directive **[Compliant](#)**

California proposition 65 **WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

### Use Longer

#### Lifetime extension

Repair **No**

### Use Again

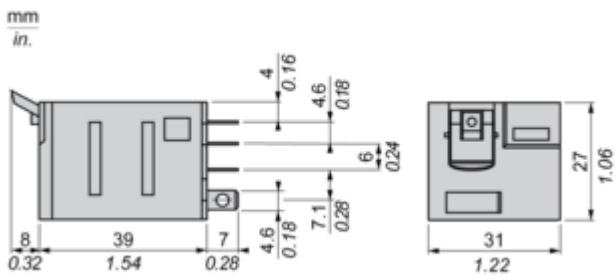
#### Repack and remanufacture

Circularity Profile **No need of specific recycling operations**

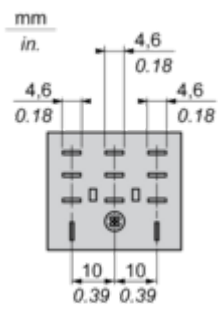
Dimensions Drawings

Dimensions

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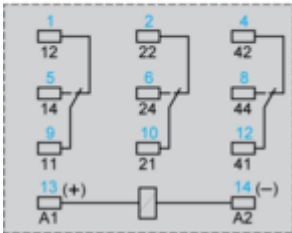
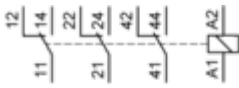
Pin Side View



Connections and Schema

Wiring Diagram

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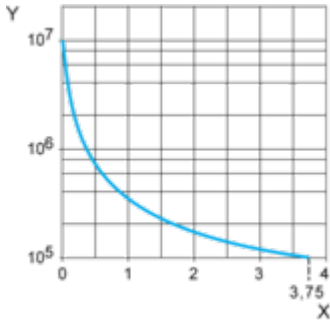
Symbols shown in blue correspond to Nema marking.

Performance Curves

Electrical Durability of Contacts

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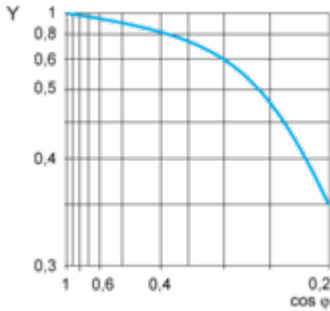
Durability (inductive load) = durability (resistive load) x reduction coefficient.  
Resistive AC load



X Switching capacity (kVA)

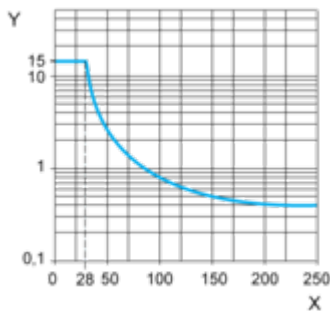
Y Durability (Number of operating cycles)

Reduction coefficient for inductive AC load (depending on power factor cos φ)



Y Reduction coefficient (A)

Maximum switching capacity on resistive DC load



X Voltage DC

Y Current DC

**Note :** These are typical curves, actual durability depends on load, environment, duty cycle, etc.

Technical Illustration

Dimensions

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mm  
in.

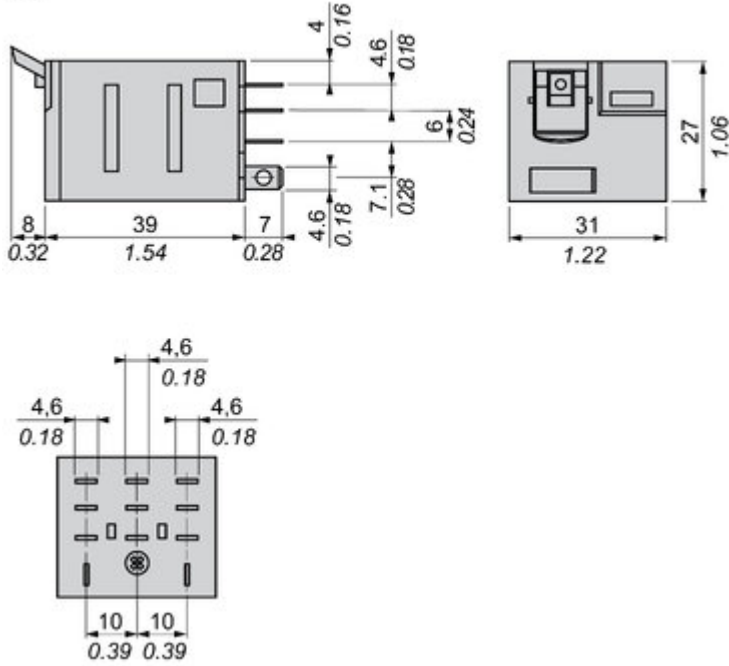
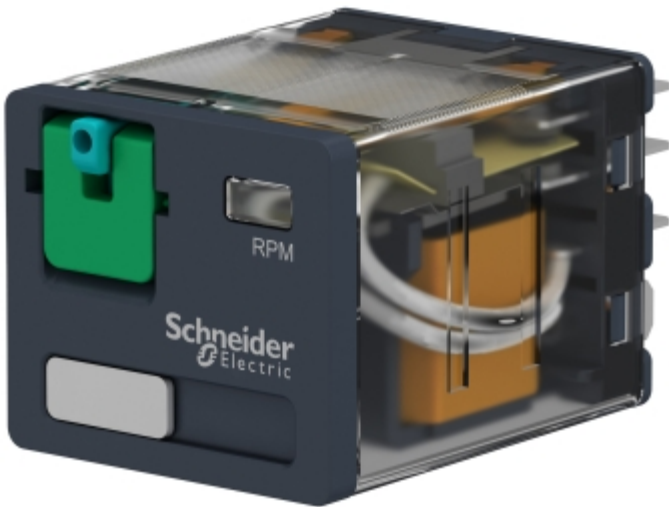
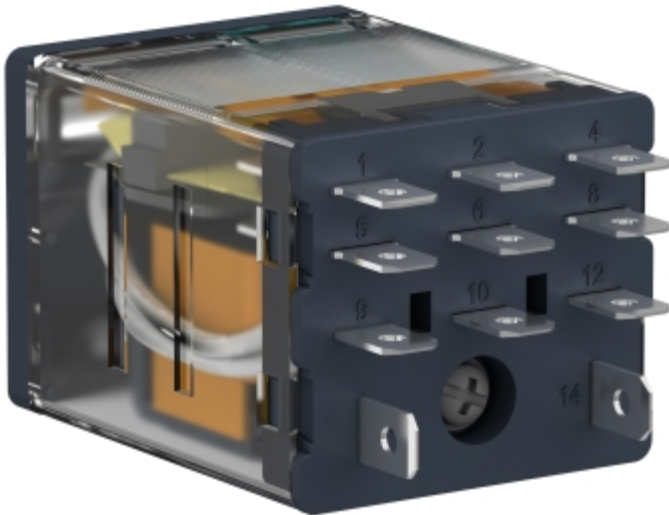


Image of product / Alternate images

Alternative

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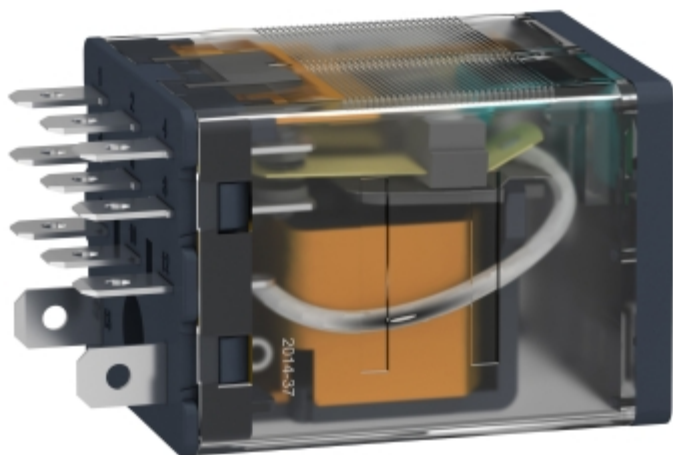


Image of product in real life situation

